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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

CHARLENE DZIELAK, SHELLEY BAKER,
FRANCIS ANGELONE, BRIAN MAXWELL,
JEFFERY REID, KARI PARSONS, CHARLES
BEYER, JONATHAN COHEN, JENNIFER
SCHRAMM, and ASPASIA CHRISTY on behalf
of themselves and all others similarly situated,

Plaintiffs,

v.

WHIRLPOOL CORPORATION, LOWE'S HOME
CENTERS, LLC, SEARS HOLDINGS
CORPORATION, THE HOME DEPOT, INC.,
FRY'S ELECTRONICS, INC. and APPLIANCE
RECYCLING CENTERS OF AMERICA, INC.,

Defendants.

:
:
: Civil Action No. 2:12-cv-00089-KM-JBC
: Honorable Kevin McNulty
: Honorable James B. Clark, III
:
:

**BRIEF IN SUPPORT OF MOTION TO
STRIKE THE OPINIONS OF DR. R.
SUKUMAR BY DEFENDANTS
WHIRLPOOL CORPORATION,
LOWE'S HOME CENTERS, LLC,
SEARS HOLDINGS CORPORATION,
AND FRY'S ELECTRONICS, INC.**

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INTRODUCTION

Plaintiffs theorize that all purchasers of Maytag Centennial models MVWC6ESWW0, MVWC6ESWW1, and MVWC7ESWW0 (the “Washers”)¹ suffered uniform harm by paying an “inflated” price to receive an Energy Star-qualified washer when those Washers “do not meet the Energy Star® standard because they consume significantly more water and electricity than their labels state.” (Pls.’ Mem. of Law in Supp. of Mot. for Class Cert. (“Class Cert. Mem.”) 2, ECF No. 163.) Plaintiffs proffer the expert testimony of Dr. Ramamirtham Sukumar to isolate the portion of the purchase price consumers paid for their Washers that was supposedly attributable to the Energy Star “price premium.” Based on a survey he conducted in 2015, Dr. Sukumar opines that \$180 of the Washers’ retail price—an astonishing 44% of the average \$407 retail price—was attributable to the sticker affixed to the Washers that bears the Energy Star logo. (Decl. & Expert Rep. of Dr. R. Sukumar, Dec. 28, 2015 (“Sukumar Rep.”), ECF No. 166.) Dr. Sukumar also incorrectly assumes for purposes of his model that consumers received no value in exchange for paying that alleged price premium. But the undisputed evidence shows that consumers received substantial rebates and incentives for purchasing the Energy Star-labeled Washers and that, even assuming Plaintiffs’ allegations are true, the Washers delivered nearly all of the water and energy efficiency benefits as a fully-qualified Energy Star washer. (*See* Defs.’ Br. in Opp’n to Pls.’ Mot. for Class Cert. 5, ECF No. 178.)

Dr. Sukumar’s survey methodologies suffer from a number of flaws that render his survey unreliable and inadmissible under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). For instance, rather than use one of the established methods of conjoint analysis, Dr. Sukumar chose to calculate his “price premium” using his company’s own

¹ Models MVWC6ESWW0 and MVWC6ESWW1 are referred to collectively as the “C6ES” and model MVWC7ESWW0 as the “C7ES”.

proprietary methodology, known as ASEMAPSM. But Dr. Sukumar does not (because he cannot) show that ASEMAP has been accepted by conjoint practitioners as a reliable means for calculating a willingness to pay. Nor does he provide sufficient information necessary for Defendants to replicate his calculations.

Moreover, despite agreeing that, under his theory, similar non-Energy Star washing machines should have sold for approximately \$180 less than the Washers' \$407 average price, actual market data (as opposed to the hypothetical survey he employs) shows that comparable non-Energy Star washers did not sell in the \$227 range. Instead, actual market data shows that an otherwise nearly identical, but non-Energy Star, version of the Maytag Centennial washer sold on average for more than the Washers. Still further, Dr. Sukumar calculated his \$180 "price premium" only after discarding the data from more than 70% of survey participants. Had he actually calculated his "price premium" using all 530 respondents—as he falsely claims he did—Dr. Sukumar's "price premium" would have skyrocketed to \$852, or more than twice the Washers' average price. These and other anomalies show that Dr. Sukumar's opinions lack any indicia of reliability and should be excluded under *Daubert*.

Dr. Sukumar's survey should also be stricken as it lacks "valid scientific connection to the pertinent inquiry," as required to be admissible under Federal Rule of Evidence 702. *Daubert*, 509 U.S. at 592. Dr. Sukumar purports to calculate the portion of the retail price that was attributable to the Energy Star logo, but he merely quantifies the relative value that survey respondents ascribe to the logo. Such a subjective inquiry says nothing about the market price of the Energy Star logo and, therefore, is unhelpful to the trier of fact.

For these and other reasons set forth below, the opinions of Dr. Sukumar are inadmissible and should be stricken.

STATEMENT OF FACTS

I. PLAINTIFFS' THEORY OF LIABILITY AND PRICE PREMIUM DAMAGES

According to Plaintiffs, the “fundamental bargain [of] the ENERGY STAR® program” is that “consumers pay a higher up-front purchase price but save more on water and energy bills” over time. (2d Am. Compl. ¶ 2, ECF No. 86.) Plaintiffs allege that Defendants violated this “fundamental bargain” by mislabeling the Washers as Energy Star compliant, causing buyers to improperly pay that “higher up-front price due to the substantial price premium that ENERGY STAR® washing machines command in the marketplace” and “rendering the promised benefits of efficiency and Utility Bill savings illusory.” (*Id.* ¶ 6.) Based on this liability theory, Plaintiffs seek classwide damages that will “calculate the portion of the retail price attributable to the Energy Star label.” (Class Cert. Mem. at 27 (quoting Decl. of Colin B. Weir (“Weir Decl.”) ¶ 6); *see also* Dep. of Colin B. Weir, Apr. 22, 2016, at 77:19–78:1 (“price premium” means “the amount in the marketplace that consumers have actually paid as a direct result of defendant’s behavior of labeling their washing machines as being Energy Star”), Defs.’ Subm. Ex. A.²)

Plaintiffs offer Dr. Sukumar—a supposed “expert in conjoint analysis survey techniques”—to measure “the price premium, if any, attributable to the Energy Star logo on Maytag Centennial washing machines.” (Class Cert. Mem. at 29 (quoting Sukumar Rep. at 4).)³ Dr. Sukumar is the founder and Chief Executive Officer of Optimal Strategix Group, Inc. (“OSG”), a market research and consulting firm. (Sukumar Rep. at 3.)

² “Defs.’ Subm.” refers to the Declaration of Galen D. Bellamy Submitting Defendants’ Evidence in Support of Defendants’ Motions to Strike the Opinions of Dr. R. Sukumar, Dr. J. Michael Dennis, and Mr. Colin Weir, filed contemporaneously with this motion.

³ While Dr. Sukumar himself does not opine on damages (Sukumar Dep. at 282:4-6), Mr. Weir, Plaintiffs’ “independent economist,” opined that price premium damages can be calculated based on Dr. Sukumar’s survey findings. (Class Cert. Mem. at 28-29.)

II. SUMMARY OF DR. SUKUMAR'S METHODOLOGY AND OPINION

A. Dr. Sukumar Opines that \$180 of the Washer's Retail Price Was Attributed to the Energy Star Logo

According to Dr. Sukumar, the “price premium” is “the reduction in price needed to keep the same amount of unit sales, if the clothes washing machines were switched from having the Energy Star logo to not having the Energy Star logo.” (*Id.* at 4) Put another way, it is “the portion of price . . . that consumers pay for the clothes washing machine that you would allocate . . . to the presence of the ENERGY STAR logo.” (Dep. of R. Sukumar, Mar. 17, 2016, at 46:2-9 (“Sukumar Dep.”), Defs.’ Subm. Ex. B; *see also id.* at 47:2-6.) To calculate this “price premium,” Dr. Sukumar claims to have conducted a “conjoint analysis,” a survey that “can determine the aggregated values customers attach to different features of a product.” (Sukumar Rep. at 4-5.) Dr. Sukumar administered his survey to 564 persons—some of whom may not be from the United States and most of whom (if not all) do not own the Washers. (*See* Expert Rep. of M. Laurentius Marais, Ph.D., Apr. 26, 2016 (“Marais Rep.”), ¶¶ 115-16, ECF No. 177-4.)

Based on his survey results, Dr. Sukumar concluded that the Energy Star logo commands a “price premium” of “\$180.39 (44.3% of the average clothes washing machine price of \$406.99)” (Sukumar Rep. at 7), or that \$180 of the “retail price” consumers paid in 2009 and 2010 was attributed to the Energy Star sticker (Sukumar Dep. at 54:19–55:20).



According to Dr. Sukumar, if Whirlpool had sold the Washers without the Energy Star sticker, it would have needed to lower the price by \$180. (*Id.* at 155:18–156:1; Sukumar Rep. at 6-7.)

This \$180 “price premium” applies to any Washer sold between \$300 and \$500. (Sukumar Dep. at 154:23–155:17.) As Dr. Sukumar concedes, this means that a comparable washer without the Energy Star sticker should have been priced at \$180 lower than the Washers. (*Id.* at 159:11-22.) Thus, for example, under Dr. Sukumar’s theory, a Washer that was sold for \$300—[REDACTED]—should have been priced at just \$120, representing an astonishing 60% discount off the purchase price. (Sukumar Dep. at 156:2-8, 158:2-18.) Further, despite admitting that a comparable washer without the label should have sold for \$180 less, Dr. Sukumar does not know—and is not interested in knowing—the average price for a non-Energy Star top-loading washer. (*Id.* at 161:21–162:18 (“It wouldn’t change the conclusions of my survey . . . or my opinions in my report.”).)

B. Dr. Sukumar Used His Company’s Proprietary Survey Method, ASEMAP, to Come to His \$180 “Price Premium”

Dr. Sukumar used an Internet survey technique his company refers to as ASEMAPSM, which he claims is a type of conjoint analysis, to come to his \$180 “price premium” determination. (Sukumar Rep. at 6.) According to Dr. Sukumar’s company, ASEMAP is a “unique methodology” that uses a “smart algorithm” to “adapt[] to responses given.” *Optimal Strategix Group: An Introduction* 17 (Nov. 6, 2013), http://www.vpul.upenn.edu/careerservices/files/Optimal_Strategix_Overview_For_UPenn_-

⁴ See Suppl. Expert Rep. of Carol A. Scott ¶ 6 & Exs. 1, 4 (“Suppl. Scott Rep.”), Defs.’ Subm. Ex. C. [REDACTED]

_Revised.pdf, Defs.' Subm. Ex. D. ASEMAP was created in 2003 or 2004 by Dr. V. "Seenu" Srinivasan, the Chief Research Advisor at OSG. (Sukumar Dep. at 87:9-21, 172:15–173:12.) Dr. Sukumar's company's website repeatedly claims that ASEMAP is "OSG's proprietary . . . methodology." *See, e.g.*, OSG's Core Methodology, <http://www.optimalstrategix.com/services-and-capabilities.html> (last visited July 7, 2016) (describing OSG's "Core Methodology" as "OSG's proprietary ASEMAPSM methodology"), Defs.' Subm. Ex. E.⁵

Dr. Sukumar claims that his use of ASEMAP was appropriate because his survey tested 19 washer features or "attributes." (Sukumar Rep. at 8.) While Dr. Sukumar admits that "[f]or a large number of features, currently the most popular [conjoint] method is Adaptive Conjoint Analysis (ACA)," he claims to have chosen ASEMAP because a 2011 paper co-authored by ASEMAP's own creator, Dr. Srinivasan, purported to show that ASEMAP "predicts choices substantially and statistically better than ACA." (*Id.* (citing Oded Netzer & V. Srinivasan, *Adaptive Self-Explication of Multi-Attribute Preferences*, 48 J. Mktg. Res. 140 (2011), Defs.' Subm. Ex. G).)

Unlike other conjoint methods that ask respondents to rank, rate, and choose among whole product concepts,⁶ ASEMAP merely asks respondents questions about the relative "importance" and "desirability" of product attributes and levels (i.e., the choices within each attribute). (Expert Rep. of Peter E. Rossi, Apr. 26, 2016 ("Rossi Rep."), at 30, ECF No. 177-10.) ASEMAP uses an adaptive algorithm to construct a sequence of questions that are customized to each respondent—that is, no two respondents receive the same survey. (Sukumar Dep. at 238:15-

⁵ *See also* Case Studies, <http://www.optimalstrategix.com/case-studies.html> (last visited July 7, 2016), Defs.' Subm. Ex. E; Optimal Strategix Group, *Is Market Research Killing Innovation?*, <http://www.optimalstrategix.com/thought-leadership.html> ("OSG's innovation technique is driven by one of OSG's proprietary quantitative tools, ASEMAPSM."), Defs.' Subm. Ex. F.

⁶ *See* Brian K. Orme, *Getting Started with Conjoint* 39-52 (3d ed. 2014) (describing the different conjoint methods), Defs.' Subm. Ex. H.

25.) The respondents begin by rating each level of each attribute from most to least desirable on a 0-10 scale. (Sukumar Rep. at 12; *see also id.* Ex. 6 at 50-68.) From their responses in step one, respondents are asked to mark their top ten attribute “improvements”—going from the least preferred level to most preferred level for each attribute—and then rank the attribute “improvements” using a “drag and drop.” (Sukumar Rep. at 13; *id.* Ex. 6 at 70-73.) Based on this ranking, respondents are given “paired comparison” questions in which they are asked to “indicate how important one attribute change is . . . relative to another” by allocating 100 points between two improvements. (Sukumar Rep. at 13; *id.* Ex. 6 at 78-88.) No two respondents would receive the same comparison questions, and, indeed, some respondents did not receive any comparison question involving the Energy Star logo. (Sukumar Dep. at 235:20–236:21.)

As explained by Dr. Sukumar, ASEMAP takes the “rank order information . . . together with the statistical results from analyzing the paired comparison data” to determine the “importance” of the 19 features. (Sukumar Rep. at 13.) The “importance” score is then multiplied by the “desirability scores”—obtained from rating section—to determine the “values for the different levels of each feature.” (*Id.*) From there, ASEMAP calculated, for each respondent, the incremental value for a washer with the Energy Star logo over a washer without the Energy Star logo. (*Id.* at 14.) This amount was averaged across all respondents. (*Id.*) Next, ASEMAP computed the value of a dollar over the price range \$300 to \$500 for each respondent, and averaged the result. (*Id.*) The average value of the Energy Star logo was then divided by the average value of a dollar, resulting in Dr. Sukumar’s \$180 “price premium.” (*Id.* at 15; *see also id.* at 7 (the “price premium” is “based on . . . taking the average value for the feature of interest and dividing it by the average value for a dollar”).)

C. Dr. Sukumar Discarded the Data from More than 70% of Survey Respondents to Arrive at his \$180 “Price Premium”

Dr. Sukumar states that he used the “data from 530 of the 564 respondents” to calculate his “price premium” because those 530 respondents “were of higher quality.” (Sukumar Rep. at 6; *see also id.* at 7 (“The averages are computed over 530 respondents in the main sample.”); *id.* at 16 (“Of the 564 respondents 530 respondents had higher quality data These 530 respondents constitute the main sample for subsequent analysis.”).) In fact, Dr. Sukumar excluded 402 participants, far more than the 34 participants he claimed. As shown below, Dr. Sukumar imposed six different criteria—only two of which he disclosed (Sukumar Rep. at 13, 16)—that together excluded “more than 70 percent of his respondents from his WTP computations.” (Rossi Rep. at 38-39.) Specifically, Dr. Sukumar calculated the value of the Energy Star (the numerator) from the responses of only 162 respondents and the value of the dollar (the denominator) from the responses of only 107 respondents. (Marais Rep. ¶ 111.)

Table 9: Dr. Sukumar’s Criteria for Including Survey Respondents in His Calculation of the Energy Star Price Premium

Criteria	Number of Respondents Meeting Criteria	Percent	Where Used
Completed the Survey	564	100%	
1 Not speedsters	558	99%	
2 “Higher quality”	535	95%	
Meets Criteria 1 to 2	530	94%	
3 Prefer having an Energy Star logo	456	81%	
4 Prefer paying \$200 for a washer than paying \$700	256	45%	
5 Have b1 > 0	395	70%	
Meets Criteria 1 to 5	162	29%	Numerator
6 Prefer paying \$300 for a washer than paying \$500	210	37%	
Meets Criteria 1 to 6	107	19%	Denominator

(*Id.* tbl.9.)

Had Dr. Sukumar calculated his “price premium” using all 530 respondents—as he claims to have done—Dr. Sukumar would have come to an implausible \$853.43 “price

premium,” more than twice the Washers’ average retail price of \$407. (*Id.* ¶ 112.) Still further, even among the 107 respondents that Dr. Sukumar did use, the average “respondent level” (as opposed to aggregate) willingness-to-pay (“WTP”) was \$445 with one respondent having a WTP of nearly \$6,000 and others having a WTP as low as \$2. (Rossi Rep. at 39-40 & fig.3.)

ARGUMENT

I. LEGAL STANDARD

Federal Rule of Evidence 702 permits a witness to offer an expert opinion if he is qualified as an expert and if the opinion is helpful to the trier of fact, is based on sufficient facts or data, is the product of reliable principles and methods, and the expert has reliably applied those principles and methods to the facts of the case. Fed. R. Evid. 702. In deciding whether to admit expert testimony, the trial court serves as a “gatekeeper” tasked with “ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert*, 509 U.S. at 580. The proponent of the expert testimony must prove these requirements by a preponderance of the evidence. *Oddi v. Ford Motor Co.*, 234 F.3d 136, 144 (3d Cir. 2000).

Expert testimony is inadmissible if it is not “based on valid reasoning and reliable methodology.” *Id.* (quoting *Kannankeril v. Terminix Int’l, Inc.*, 128 F.3d 802, 806 (3d Cir. 1997)). The Court is to consider the following factors in evaluating reliability:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique’s operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Id. at 156 (quoting *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 n.8 (3d Cir. 1994)). The “factors drawn from *Daubert* . . . are neither exhaustive nor applicable in every case.” *Pineda v. Ford Motor Co.*, 520 F.3d 237, 248 (3d Cir. 2008) (quoting *Kannankeril*, 128 F.3d at 806-07).

Even if sufficiently reliable, an expert’s opinion is not admissible if it will be “non-helpful” to the trier of fact and does not “fit” the facts of the case. *Daubert*, 509 U.S. at 590-91. “[A]dmissibility depends in part on ‘the proffered connection between the scientific research or test result to be presented and particular disputed factual issues in the case.’” *Paoli*, 35 F.3d at 742-43 (quoting *United States v. Downing*, 753 F.2d 1224, 1237 (3d Cir. 1985)). Therefore, “even if an expert’s proposed testimony constitutes scientific knowledge, his or her testimony will be excluded if it is not scientific knowledge *for purposes of the case*.” *Id.*

As is relevant here, Rule 702’s admissibility requirements apply at the class certification stage. *See Tyson Foods, Inc. v. Bouaphakeo*, 136 S. Ct. 1036, 1048-49 (2016) (in upholding certification, noting that the defendant “did not raise a challenge to respondents’ experts’ methodology under *Daubert*”); *In re Blood Reagents Antitrust Litig.*, 783 F.3d 183, 187-88 (3d Cir. 2015). “Expert testimony that is insufficiently reliable to satisfy the *Daubert* standard cannot ‘prove’ that the Rule 23(a) prerequisites have been met ‘in fact,’ nor can it establish ‘through evidentiary proof’ that Rule 23(b) is satisfied.” *Blood Reagents*, 783 F.3d at 187 (quoting *Comcast Corp. v. Behrend*, 133 S.Ct. 1426, 1432 (2013)).

II. DR. SUKUMAR’S OPINIONS SHOULD BE EXCLUDED BECAUSE THEY ARE NOT BASED ON RELIABLE METHODS

Plaintiffs cannot prove that Dr. Sukumar’s conclusion that the Energy Star logo commands a \$180 “price premium” was the product of a reliable methodology. His proffered testimony should, therefore, be excluded.

A. Dr. Sukumar Has Not Shown that ASEMAP Is Generally Accepted in the Conjoint Community or Used By Others Outside of the Context of Litigation for Isolating a Historic Price Premium

As the Third Circuit has explained, “[a] known technique which has been able to attract only minimal support with the community may properly be viewed with skepticism.” *Id.* Courts

are, thus, to pay particularly pay close attention when an expert witness departs from generally-accepted methodologies.

A judge or jury is not equipped to evaluate scientific innovations. If, therefore, an expert proposes to depart from the generally accepted methodology of his field and embark upon a sea of scientific uncertainty, the court may appropriately insist that he ground his departure in demonstrable and scrupulous adherence to the scientist's creed of meticulous and objective inquiry.

Braun v. Lorillard Inc., 84 F.3d 230 (7th Cir. 1996). Evidence “of the non-judicial uses of the technique in question” is part of this inquiry because non-judicial use of a technique can imply that third parties—i.e., persons other than the proponent of the expert testimony, for whom the testimony is typically self-serving—would vouch for the reliability of the expert's methods.”

United States v. Mitchell, 365 F.3d 215, 242-43 (3d Cir. 2004) (emphasis added).

Here, rather than use an established method of conjoint analysis, Dr. Sukumar chose to use ASEMAP, a little-known proprietary method that is rarely used—if at all—outside his own firm. As Dr. Sukumar's company likes to tout, ASEMAP is “OSG's proprietary . . . methodology.” <http://www.optimalstrategix.com/services-and-capabilities.html> (emphasis added). ASEMAP is substantially different from any accepted conjoint methods—if it can be considered “conjoint” at all. (*See* Dep. of Peter Rossi, June 1, 2016 (“Rossi Dep.”), at 70:13-14 (“ASEMAP is not a legitimate methodology for conjoint”), Defs.' Subm. Ex. I.) Indeed, *Getting Started with Conjoint Analysis*—the book repeatedly relied on by Dr. Sukumar in his two reports⁷—makes no mention of ASEMAP, despite the book being published three years after Dr. Srinivasan's ASEMAP article and a decade after ASEMAP was first developed. *See generally*

⁷ *See* Sukumar Rep. at 5; Rebuttal Expert Rep. of Ramamirtham Sukumar, Ph.D. (“Sukumar Rebuttal Rep.”) at 3, 4, 12, 14, ECF No. 186.

Orme, *supra*, at 29-52, 171 (identifying the different methods of conjoint analysis and discussing the appropriate method to use, but never mentioning ASEMAP as an option).⁸

Dr. Sukumar cannot merely rely on the fact that conjoint has generally been “widely accepted and used” (Sukumar Rep. at 5), but must show that the same is true of ASEMAP. He has not done so. For instance, while Dr. Sukumar testified that his company has used ASEMAP “very extensively,” he could not answer whether the technique is used outside his firm. (*See* Sukumar Dep. at 169:22–170:10, 171:1-4, 174:1-7). Similarly, despite noting that 18,000 conjoint studies are conducted worldwide each year (Sukumar Rep. at 5 (citing Orme, *supra*, at 143); Sukumar Rebuttal Rep. at 4), he could not identify how many of those were conducted using ASEMAP (Sukumar Dep. at 171:9-14).

The answer is likely infinitesimal. OSG markets ASEMAP as its proprietary software, thereby implying that no other practitioners use the methodology. (*See, e.g.*, Sukumar Dep. at 84:19-23 (“[T]here are . . . more than 18,000 conjoint studies that are done each year, you know, across the world in different languages, in different countries, using ASEMAP we’ve done many hundreds of those conjoint studies.” (emphasis added)).) Dr. Sukumar notes that ASEMAP has been “used in more than 500 engagements” by “real world companies,” presumably over the 11-plus years that ASEMAP has been around. (Sukumar Rebuttal at 9). Even if those 500 engagements were by practitioners not affiliated with OSG (and there is no evidence that this is the case), that means that ASEMAP was used in just 0.25% of the approximate 198,000

⁸ It appears from OSG’s website that Dr. Sukumar and his colleagues use ASEMAP in all or most of OSG’s engagements, thereby undermining Dr. Sukumar’s proffered reason (the need to test a high number of attributes) for selecting ASEMAP over other methods. *See, e.g.*, <http://www.optimalstrategix.com/services-and-capabilities.html> (explaining that OSC’s “Core Methodology” is “OSG’s proprietary ASEMAP methodology”). Indeed, while Dr. Sukumar testified that he needed to use 19 attributes based on his two focus groups, he purposely did not record or keep notes of those sessions, thereby preventing Defendants from assessing his stated reason. (Sukumar Dep. at 184:17–185:2, 186:15–187:2, 193:1–196:6.)

conjoint analysis conducted over an eleven-year period. *See Oddi*, 234 F.3d at 145 (a “technique which has been able to attract only minimal support with the community may properly be viewed with skepticism”). And Dr. Sukumar provides no evidence showing that any of those “real world companies” used ASEMAP to isolate the portion of a historic price attributed to a feature, as opposed to one of the other reasons a company might use ASEMAP. (*See Optimal Strategix Group: An Introduction*, *supra*, at 14; *cf. Rossi Dep.* at 180:2-22 (noting that ASEMAP may be valid for someone wanting “to simulate market shares or some other commercial application”).)

In short, Dr. Sukumar is attempting to use a little-known survey method to isolate the portion of a historic price. He has neither proved that ASEMAP is generally accepted in the conjoint community for doing so, nor shown that others use ASEMAP for the purpose he seeks to use it here. Dr. Sukumar’s survey should, thus, be excluded. *See, e.g., E.E.O.C. v. Bloomberg L.P.*, No. 07 CIV. 8383 LAP, 2010 WL 3466370, at *12 (S.D.N.Y. Aug. 31, 2010) (excluding expert whose “unorthodox” and “atypical” method was unsupported by any “source that would suggest his methodology is recognized by other statisticians”).

B. Dr. Sukumar’s ASEMAP Methodology Cannot Be Replicated

“A basic requirement under *Daubert* is that the methodology followed is capable of being replicated.” *Smith v. Freightliner, LLC*, 239 F.R.D. 390, 393 (D.N.J. 2006); *see Daubert*, 509 U.S. at 593 (a “scientific methodology” is based on “generating hypotheses and testing them to see if they can be falsified”). This means that the expert’s method must consist of a “testable hypothesis.” *Kannankeril*, 128 F.3d at 806 n.6 (3d Cir. 1997) (quoting *Paoli*, 35 F.3d at 742 n.8). Indeed, the “hallmark” of *Daubert*’s reliability prong is the “generation of testable hypotheses that are then subjected to the real world crucible of experimentation, falsification/validation, and replication.” *Caraker v. Sandoz Pharm. Corp.*, 188 F. Supp. 2d 1026, 1030 (S.D. Ill. 2001).

Here, Dr. Sukumar's survey cannot be replicated. Rather than use a customary method of conjoint, Dr. Sukumar chose to use a proprietary methodology that—in OSG's own words—is “unique” and uses a “smart algorithm [to] adapt[] to responses given.” (*Optimal Strategix Group: An Introduction*, *supra*, at 17.) Yet Dr. Sukumar has refused to divulge any details about how ASEMAP actually works, including the algorithm that drives its results.⁹ Without that algorithm, it is impossible to replicate, test, or validate the method. (*See* Rossi Rep. at 27-28 (“Plaintiffs have not produced information sufficient to replicate Dr. Sukumar's results. Replication requires the exact algorithm used by ASEMAP.”).) Specifically, Dr. Sukumar “produced only the inputs”—i.e., respondents' answers to his survey's questions—and “the output”—i.e., the values or “part-worths”—but he has not revealed the crucial step for replication: how ASEMAP converted those “inputs into the outputs.”¹⁰ (*Id.* at 28.) Without doing so, it is impossible “to even establish that [the] output supplied by Dr. Sukumar is, indeed, the result of application of his software.” (*Id.*)

Dr. Sukumar purports to outline the ASEMAP methodology in just two pages of his report, but that section merely describes the different ASEMAP exercises and gives a vague explanation for each exercise's role in the “price premium” calculation. (*See* Sukumar Rep. at 12-14.) It does not detail how ASEMAP actually calculates the “values” or “part-worths” necessary to arrive at his \$180 figure. (Rossi Rep. at 28.) Rather, Dr. Sukumar refers readers to

⁹ During his deposition, Dr. Sukumar refused to answer questions about ASEMAP's computer code or even the cost to obtain a license to inspect it, citing a “confidentiality agreement” with Dr. Srinivasan. (Sukumar Dep. at 87:9-21, 178:18–179:9.)

¹⁰ Defendants requested that Plaintiffs provide “all ASEMAP algorithms, equations, calculations, and data, including interim data points,” explaining that such information is necessary to “recreate and verify Dr. Sukumar's analysis” and therefore is part of the Rule 26 expert disclosure obligations. (Letter from Cedric D. Logan to Neal Deckant, Jan. 15, 2016, Defs.' Subm. Ex. J.) In response, Plaintiffs merely produced the survey responses and a spreadsheet of the values or part-worths, but not the algorithms.

Dr. Srinivasan's ASEMAP article. (*See* Sukumar Rep. at 12 n.8; Sukumar Dep. 231:23-25.) But that article “does not specify the algorithm precisely enough to allow even an expert statistician/programmer to produce code that would exactly replicate his results.” (Rossi Rep. at 28.) For instance, Dr. Sukumar cursorily notes that ASEMAP uses “adjusted R square” to “cleanse” the sample of respondents who do not meet an internal validation criterion, but the ASEMAP article says nothing about this practice. (*Id.*; *compare* Sukumar Rep. at 13, 16-17, *with* Defs.' Subm. Ex. G.) Further, Dr. Srinivasan has “changed the algorithm at least ten times since [publishing] that article”—a fact which Dr. Sukumar does not dispute. (Rossi Dep. at 173:5-12.)

Tellingly, Dr. Sukumar has no response to this criticism other than to fault Defendants for not reaching out to Dr. Srinivasan to license the software. (*See* Sukumar Rebuttal at 10; Sukumar Dep. 178:18-23.) But Plaintiffs bear the burden of demonstrating that Dr. Sukumar's methods are reliable, not the other way around.¹¹ *See Oddi*, 234 F.3d at 144. In the absence of Dr. Sukumar providing the necessary algorithm and enabling Defendants to test his methods, the Court cannot find that his methodology is reliable. *See Zenith Elecs. Corp. v. WH-TV Broad. Corp.*, 395 F.3d 416, 419 (7th Cir. 2005) (“An expert must offer good reason to think that his approach produces an accurate estimate using professional methods, and this estimate must be testable. Someone else using the same data and methods must be able to replicate the result.”).

Dr. Sukumar chose to forgo using an accepted conjoint method in favor of a little-known, proprietary one. If “an expert proposes to depart from the generally accepted methodology of his field and embark upon a sea of scientific uncertainty,” he must “ground his departure in demonstrable and scrupulous adherence to the scientist's creed of meticulous and objective

¹¹ Moreover, buying the software would not cure the fundamental problem: access to the ASEMAP software “does not permit replication or inspection of the formulae used . . . that ultimately enter into Dr. Sukumar's WTP computation.” (Rossi Rep. at 28.) Buying the software would permit a user to run the program “but not inspect the code itself.” (*Id.*)

inquiry.” *Braun*, 84 F.3d at 235. Because Dr. Sukumar has failed to do so, his testimony should be excluded. *See, e.g., Smith*, 239 F.R.D. at 393 (excluding expert testimony regarding the diminished value of a motor home where the expert’s methodology “cannot be replicated”); *In re Ondova Ltd. Co.*, No. 09-34784-SGJ-11, 2012 WL 5879147, at *10 (Bankr. N.D. Tex. Nov. 21, 2012) (excluding expert testimony about the value of Internet domain names because the expert could not share the methodology that he used because it was “proprietary information”).

C. The Only Peer-Reviewed Article Discussing ASEMAP Was Authored by its Inventor (and OSG’s Chief Research Officer) and Said Nothing About Using ASEMAP to Isolate a Historical “Price Premium”

Dr. Sukumar relies heavily on the fact that ASEMAP was the subject of one published article, but that article was co-authored by Dr. Srinivasan—the inventor of ASEMAP who is Chief Research Advisor at Dr. Sukumar’s company.¹² (Sukumar Dep. at 170:11-25.) While the publication in a peer-reviewed journal may “suggest” that a technique is “good science,” it is “not a sine qua non of admissibility: it does not equate with reliability.” *Oddi*, 234 F.3d at 145 (quoting *Daubert*, 509 U.S. at 593-94). Rather, the fact of publication “will be a relevant, though not dispositive, consideration in assessing the scientific validity of a particular technique or methodology upon which an opinion is premised.” *Id.*

Here, the ASEMAP article says nothing about whether ASEMAP can isolate the portion of a historic retail price attributed to a feature. Rather, the authors proposed ASEMAP as a tool for the “market research industry” to “measur[e] consumers’ preferences over a larger number of

¹² While Dr. Sukumar repeatedly testified that the ASEMAP article “received a lot of awards” (Sukumar Dep. at 173:10-17, 170:18, 172:3-7), this appears to be false. *See American Marketing Association, Previous Recipients / Paul E. Green Award*, <https://www.ama.org/publications/JournalOfMarketingResearch/Pages/PaulEGreenAward.aspx> (last visited July 7, 2016) (listing award recipients but not mentioning Dr. Srinivasan’s ASEMAP article), Defs.’ Subm. Ex. K; V. “Seenu” Srinivasan, Curriculum Vitae, Defs.’ Subm. Ex. L (listing awards for various publications but not mentioning an award for publication in the *Journal of Marketing Research* in 2011 or later).

attributes,” reporting that their “empirical applications” found that “the percentage of top choices correctly predicted” by ASEMAP was higher than other methods tested. Srinivasan, *supra* at 140, 155. But consumer preferences for the Energy Star logo say nothing about whether consumers were actually charged a premium when they bought their Washers and, if so, what that premium was. Further, the authors concluded only that ASEMAP “could span . . . to more generally estimating the priorities people attach for a long list of items,” including “prioritizing research topics and voter issues,” not that it could be used to isolate a historic price premium. *Id.* at 155. Dr. Sukumar is unable to point to a single peer-reviewed article showing that.¹³

In short, Dr. Sukumar’s claim that ASEMAP is a valid methodology for isolating a historic price premium is supported by nothing more than his own say-so. That is insufficient under *Daubert* and its progeny. *See Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 158 (1999) (in determining whether a particular methodology is reliable, the court is not required to “admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert” (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997))); *Reil v. Ruby Tuesday Inc.*, No. CV 13-5580, 2015 WL 7760352, at *4 (D.N.J. Dec. 2, 2015) (“If *Daubert* and its progeny require anything, it is that plaintiffs come forward with proof of a valid methodology based on more than just the *ipse dixit* of the expert.” (citation omitted)).

D. Dr. Sukumar’s ASEMAP Survey Leads to Irrational Results that Ignore Market Reality, Further Underscoring that His Methodology Is Not Reliable

Dr. Sukumar’s survey yielded a number of irrational results that defy what actually would have happened in the marketplace had Whirlpool sold the Washers without the Energy Star logo.

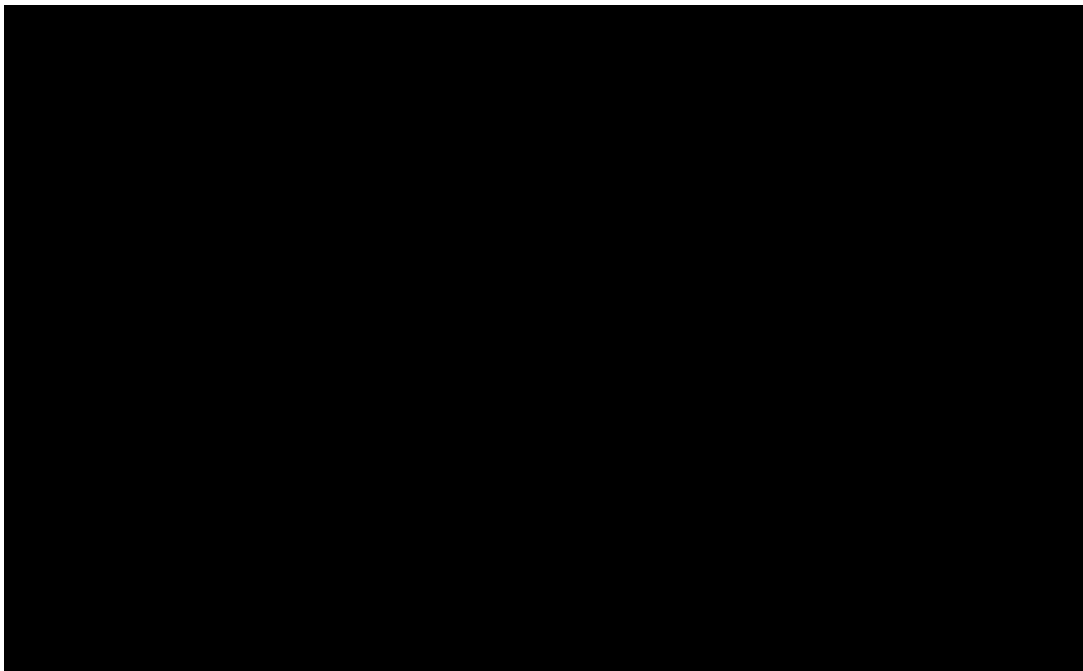
¹³ In his rebuttal report, Dr. Sukumar identifies a second peer-reviewed article that supposedly shows that ASEMAP has “external and predictive value.” (Sukumar Rebuttal Rep. at 9 (citing V. Srinivasan & Chan Su Park, *Surprising Robustness of the Self-Explicated Approach to Customer Preference Structure Measurement*, 34 J. Mktg. Res. 286 (1997))). But that article says nothing whatsoever about ASEMAP and, indeed, was published before ASEMAP was even introduced.

These facts confirm that Dr. Sukumar's report lacks reliability and should be excluded. *See ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 291 (3d Cir. 2012) (affirming exclusion of damages expert that "bore insufficient indicia of reliability to be submitted to a jury"); *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2012 WL 850705, at *11 (N.D. Cal. Mar. 13, 2012) (excluding conjoint study where its "own irrational results" showed it was not reliable); *Brown v. The Am. Tobacco Co.*, No. JCCP4042, 2013 WL 7154428, at *6 (Cal. Super. Ct. Sept. 23, 2013) (disregarding conjoint where the "flawed model produced nonsensical results" and "real world indicators convincingly show that Plaintiffs' model does not reflect reality"), *aff'd sub. nom., In re Tobacco Cases II*, 192 Cal. Rptr. 3d 881 (Cal. Ct. App. 2015).

First, Dr. Sukumar opines that, for any washer priced between \$300 and \$500, \$180 of the retail "price would be attributable to the ENERGY STAR logo."¹⁴ (Sukumar Dep. at 43:13-19, 55:2-20, 154:3-10.) This means that, "according to the conjoint survey we did here," "if you have a machine that you're selling at \$300 with the ENERGY STAR logo, and you decide you want to take out the ENERGY STAR logo, then . . . the price you should charge for it should be \$180 less." (*Id.* at 157:19–158:18.) In other words, a \$300 washer should be reduced to just \$120 and the average \$407 washer should be reduced to just \$227. (*Id.* at 155:14–156:8.) This also "suggest[s]" that a comparable washer without the logo would be priced about \$180 lower than the Washers were actually priced. (*Id.* at 159:11-22.)

¹⁴ Dr. Sukumar testified that the price premium could alternatively be applied as a percentage (44.3%), which he calculated by dividing the \$180.39 premium by the \$407 average Washer price. (Sukumar Dep. at 295:3–297:11.) Even assuming a price premium could be a fixed percentage of the price (it cannot, *see In re NJOY, Inc. Consumer Class Action Litig.*, 120 F. Supp. 3d 1050, 1122 (C.D. Cal. 2015)), that would still mean that Dr. Sukumar is saying that a \$300 washing machine should have sold for \$132.90 without the logo—a finding that completely ignores the fair market price of a non-Energy Star top-loading washer.

But these conclusions defy both common sense and market reality. No retailer sold a new washer with features comparable to those on the Washers for as little as \$120 (or \$227). Indeed, Dr. Sukumar could not identify any such washer. (*Id.* at 156:22–157:13.) In fact, real-world data shows that comparable non-Energy Star traditional top-loaders sold for around the same as the Washers and sometimes more. For instance, a February 2010 issue of *Consumer Reports* issue listed a number of non-Energy Star top-loading washers, none of which had a price under \$330 and most of which had a price above \$400. (Expert Rep. of Carol A. Scott, Ph.D., Apr. 26, 2016 (“Scott Rep.”), Ex. 4A, ECF No. 177-11.) And a similar Maytag Centennial washer that was not Energy Star, the “C500”, sold on average for more than the C6ES, as shown below.¹⁵



(*Id.*; Suppl. Scott Rep. ¶ 2 & Ex. 3.) In other words, market reality shows that Dr. Sukumar’s \$180 “price premium”—as he defines that term—is totally divorced from the historical market reality and is, thus, irrational.

¹⁵ By contrast, the C6ES, which have several superior features to the C500s, sold in 2009 for an average retail price of [REDACTED] (Suppl. Scott Rep. at Ex. 3; Rossi Rep. at 10-11.)

Second, while Dr. Sukumar’s survey tested 19 attributes that he described as “important” to washing machines purchasers (Sukumar Dep. at 24:14–25:14), he calculated the “values” for just two of these attributes—Energy Star and price—which he then used to opine that \$180 of the Washer’s retail price is attributable to the Energy Star logo. (Sukumar Rep. at 9.) This implies that the balance of the retail price—e.g., \$227 of the average \$407 price—can be attributed to all the other washer attributes combined. (Marais Rep. ¶ 121.) But this is not the case.

In fact, using Dr. Sukumar’s methodology and the survey data he provided, the “price premium” for those attributes found in the Washers aggregate to nearly \$1,800, as shown below. (*Id.* at ¶¶ 122-24; *see also* Rossi Rep. at 41 & tbl.1 (“According to Dr. Sukumar’s own WTP formula, a washer configured with features chosen to maximize WTP would command a price that is \$1,834 over the price of a washer configured for the smallest WTP.”).)

Table 13: Implied Price Premiums for Attributes of Subject Washers

Attribute Number and Description	“Superior” Attribute Level	“Inferior” Attribute Level	Price Premium
02: Loading Type	Top Load	Front Load	\$ 248.28
03: Energy Star	Energy Star logo	No Energy Star logo	\$ 180.39
05: Type of water temperature control	Manual	Automatic	\$ 176.31
11: Water level settings	Automatic	Multiple settings not available	\$ 165.31
13: Type of clothes washing machine	Washer/Dryer separate	Washer+Dryer all in one	\$ 579.44
16: Type of clothes washing machine lid	Metal lid opaque	Glass lid see-through	\$ 160.49
18: Ability to stop the clothes washing machine mid-cycle by opening the lid	Can be stopped mid-cycle by op	Cannot be stopped mid-cycle by opening lid	\$ 154.15
19: High efficiency clothes washing machine	No high efficiency label	High efficiency label	\$ 129.79
			Total: \$ 1,794.16

(Marais Rep. at tbl. 13; *see also id.* at fig.28.) This confirms that Dr. Sukumar’s “price premium” for the Energy Star logo is unrealistically large and unreliable.

Finally, Dr. Sukumar chose to calculate his “price premium” on an aggregate level—that is, by dividing the average of values for the Energy Star logo by the average value of a dollar. However, calculating his data on a respondent level leads to anomalous results: an average price premium of \$445—more than what the Washer sold for on average—and a distribution of individual price premiums ranging from \$2 to \$6,000. (Rossi Rep. at 39.) No one could seriously

believe that the “average” respondent in Dr. Sukumar’s sample values the Energy Star logo at the same or more as the price of a new Washer.

E. Dr. Sukumar Had to Exclude More than 70% of His Survey Data to Come to His \$180 “Price Premium”

Despite claiming to use the data of 530 respondents who had “higher quality data” to compute his “price premium” (Sukumar Rep. at 16), Dr. Sukumar actually used the responses from only 162 respondents to calculate the average value of the Energy Star logo and only 107 respondents to calculate the average value of a dollar. (*See* Statement of Facts, Part IV, *supra*.) In other words, he discarded the data from more than 70% of the 564 individuals who completed his survey. (*Id.*) Had he not done so, his “price premium” would have come to \$852—a facially implausible number that is more than twice the Washers’ average price. (Marais Rep. ¶ 112.)

In response, Dr. Sukumar claims that eliminating all but “approximately 170 respondents” ensures that “we have included only high quality respondents.” (Sukumar Rebuttal at 13.) But the fact that more than 70% of his respondents were not of “high quality” shows that Dr. Sukumar’s survey methods lack scientific rigor. *See Brown*, 2013 WL 7154428, at *8-9 (“The dramatic effect of this single correction”—eliminating the 81% of respondents who gave “nonsensical results”—“leads the Court to conclude the Plaintiffs’ entire survey is unreliable”).

Further, Dr. Sukumar does not even attempt to rationalize his exclusion of 180 respondents who indicated that they preferred a washer without the Energy Star logo, 29 respondents who had an R-squared of less than .02, or 169 respondents who had a $B1 > 0$. Rather, his only response is to say that it is “very common” to have “price reversals”—i.e., to exclude those respondents who preferred paying more money than less money—and that price reversals are “well-documented” in academic literature. (Sukumar Rebuttal at 12.) While it may be common to exclude “some” respondents who exhibit preference that do not make “economic

sense,” Dr. Sukumar’s “price reversals” led to the exclusion of the majority of his respondents: 55% (or 308 respondents) from his numerator and 62% (or 354 respondents) from his denominator. (Rossi Rep. at 39.) The fact that such a high percentage preferred a more expensive washer to a less expensive washer shows that survey respondents did not hold “non-specified features constant” but instead placed “implicit attributes,” such as quality, on price. *Oracle Am., Inc.*, 2012 WL 850705, at *11 (excluding conjoint where its “own irrational results”—i.e., the fact that one quarter of respondents preferred or were indifferent to a smartphone costing \$200 to a theoretically identical one costing \$100—“shows that study participants did not hold all other, non-tested features constant”). In other words, despite being instructed to “think about each attribute individually” (Sukumar Rep. Ex. 6), survey participants equated lower price with lower quality, thereby indicating their preference for a more expensive washer as a proxy for quality.

F. Dr. Sukumar’s Survey Population Is Not Representative of the Class

Under *Daubert*, consumer surveys must be conducted according to “generally accepted principles of survey research.” *Menasha Corp. v. News Am. Mktg. In-Store, Inc.*, 238 F. Supp. 2d 1024, 1030 (N.D. Ill. 2003). For a survey to be properly designed, “an appropriate target population must be identified” and a “sample that accurately represents the target population must be selected.” *Id.*; see also *J & J Snack Foods, Corp. v. Earthgrains Co.*, 220 F. Supp. 2d 358, 369 (D.N.J. 2002) (a key characteristic of a “properly conducted survey” is that a “proper universe must be examined and a representative sample must be chosen” (quoting *Pittsburgh Press Club v. U.S.*, 579 F.2d 751, 758 (3d Cir. 1978))). Without any support, Dr. Sukumar summarily announces that his survey meets this criterion: “the respondents are representative of the class of consumers who purchased Maytag Centennial clothes washing machines.” (Sukumar Rep. at 12.) Yet Dr. Sukumar has done nothing to actually ensure that this is true.

In fact, while Dr. Sukumar testified that “[w]hat’s relevant here is th[at] class members were surveyed” and that his survey shows that “the class members, in an aggregate, are willing to pay a price premium for that ENERGY STAR logo” (Sukumar Dep. at 28:18–29:6 (emphasis added)), he took affirmative steps that effectively excluded putative class members. Specifically, his survey was limited to those who “purchased a clothes washing machine within the past year.” (*Id.* at 12 & Ex. 4.) Dr. Sukumar reasoned that because washers “are usually purchased for long term use (5 years or more),” a more recent purchaser is “bound to remember the actual decision making process.” (*Id.*; *see also* Weir Decl. ¶ 15 (“the minimum average lifespan” of a washer is 11 years).) Even if true, Dr. Sukumar’s decision to include only “more recent” purchasers has the practical effect of excluding putative class members because they necessarily bought their machines in the 2009-2012 time period and have not yet replaced them.¹⁶ (Marais Rep. ¶ 116.)

Moreover, Dr. Sukumar testified that his “approach” to “price premium [was] really to understand what’s the value of the -- to the class, as an aggregate, of the presence of the ENERGY STAR logo.” (Sukumar Dep. at 59:12-18 (emphasis added).) But he did nothing to ensure that his respondents, if not actual Washer purchasers, were at least purchasers of similar machines—i.e., lower-priced, traditional top-loading Energy Star washers. To the contrary, Dr. Sukumar allowed purchasers of high-efficiency (“HE”) front-loaders and top-loaders to participate in his survey, despite the fact that HE machines cost hundreds of dollars more than the Washers, and despite the fact that HE machines are generally far more water- and energy-efficient than traditional Energy Star machines, like the Washers. (*Id.* at 142:16-22, 148:9-13.) In other words, as Dr. Sukumar conceded, purchasers of HE washers “could” place a different value

¹⁶ Despite designing the survey in a way that effectively excluded all putative class members, Dr. Sukumar testified that he had the opposite intent: survey respondents were “screened . . . for having to be class members” and that he was “absolutely positive” that he did not exclude any of them from the survey. (Sukumar Dep. at 108:12-19, 110:16–112:17.)

on the Energy Star logo than purchasers of a traditional top-loading washer. (*Id.* at 145:6-14.)

And Dr. Sukumar admitted that did not know if purchasers of HE washers are comparable to purchasers of the Washers. (*Id.* at 143:12-19.)

In an attempt to sidestep these criticisms, Dr. Sukumar insists that his survey sample is representative of the putative class simply because it “reflects the U.S. census,” meaning the U.S. population as a whole. (*Id.* at 114:22–115:24.) But that is an admission that Dr. Sukumar did not in fact attempt to isolate the appropriate target population—that is, the subset of the U.S. population that would have been at least potential purchasers of conventional Energy Star top-loading washers.

And it turns out that even that claim—that the survey target population he “isolated” is basically anyone living in the United States—is not true. Dr. Sukumar did not know what procedures the third-party panel provider he contracted with used to recruit survey respondents, let alone what that provider did to ensure that they “reflected” the U.S. census. (*Id.* at 121:7–124:17; *see also* Rossi Rep. at 25.) In fact, Dr. Sukumar “did not even restrict the study participants to residents of the United States. His survey data include respondents from Australia, Brazil, Canada, Denmark, Germany, Hungary, India, Iran, Israel, Italy, Mexico, and the United Kingdom.” (Marais Rep. ¶ 115; *see also* Rossi Rep. at 25.) Dr. Sukumar’s only response to that rather fundamental criticism is to note that survey respondents have a propensity to travel, to point to the “notoriously inaccurate” functionality of “IP geolocation services,” and to fault Defendants for not making “any attempt to verify the residence of IP addresses of respondents that appear to be outside the country.”¹⁷ (Sukumar Rebuttal Rep. at 8.) In other words, he may

¹⁷ This section of Dr. Sukumar’s rebuttal report is virtually identical to the rebuttal report of Mr. Weir, suggesting that it was drafted by Plaintiffs’ counsel, not their experts. (*Compare* Sukumar Rebuttal at 8-9, *with* Rebuttal Decl. of Colin B. Weir ¶¶ 77-79, ECF No. 184.)

not know whether the survey respondents lived in the U.S., but Defendants have not “proven” to his satisfaction that they do not. But it is Dr. Sukumar’s job to establish that his survey panel is representative of the class (and not made up of individuals living outside of the U.S.), and he effectively admits that he does not know, and cannot know, whether that is the case.

Dr. Sukumar’s survey thus fails to satisfy *Daubert* and should be excluded. *See Menasha Corp.*, 238 F. Supp. 2d at 1030 (excluding a consumer survey, in part, because no attempt was made “to select a sample to approximate the relevant characteristics of the target population”).

III. DR. SUKUMAR’S OPINIONS SHOULD BE EXCLUDED AS HIS SURVEY DOES NOT FIT PLAINTIFFS’ PRICE PREMIUM DAMAGES MODEL

Plaintiffs’ theorize that putative class members were injured by paying the “substantial price premium that ENERGY STAR® washing machines command in the marketplace” when the Washers do not deliver on the “promised benefits of efficiency and Utility Bill savings” because they are not Energy Star compliant. (2d Am. Compl. ¶ 6.) Based on this liability theory, Plaintiffs submit that the appropriate measure of damages is “the portion of the retail price attributable to the Energy Star label,” which they say Dr. Sukumar’s survey calculates. (Class Cert. Mem. at 27, 29.) Under *Comcast*, any model supporting a “plaintiff’s damages case must be consistent with its liability case” and must measure only those damages attributable to that theory. 133 S. Ct. at 1433. Dr. Sukumar’s testimony is, thus, admissible to prove classwide damages only if his proffered survey can (1) ascertain the portion of the Washers’ historical retail price that was solely attributable to the presence of the Energy Star logo, and (2) isolate the portion of that price premium that had no corresponding benefit. Although even Dr. Sukumar contends that his model does only the former, in fact it does neither.

A. Dr. Sukumar's Survey Fails to Ascertain the Portion of the Washer's Retail Price Attributed to the Energy Star Logo

While Dr. Sukumar claims that he determined “the portion of that price that, looking backward, you would attribute to . . . the ENERGY STAR logo” (Sukumar Dep. at 262:2-10; *see also id.* at 46:2-17, 48:10–49:2), a review of his methodology shows that this is false. His survey asked respondents a series of questions regarding their preferences for various attributes to determine the average “value difference” between a washer with the Energy Star logo and one without. (Sukumar Rep. at 5-6.) As he repeatedly testified at his deposition, his survey focused on “the value consumers place on the presence of the ENERGY STAR logo versus the absence.” (Sukumar Dep. at 33:24–34:15; *see also id.* at 41:24–42:4, 59:3-18, 60:15-20, 66:7-25.)

But a consumer's value for the Energy Star logo says nothing about what retailers actually charged putative class members in 2009 and 2010 for the logo on the Washers in this case. Rather, it is a subjective inquiry that—at most—averages what the survey respondents stated that they were willing to pay in 2015 for the Energy Star logo. *See Saavedra v. Eli Lilly & Co.*, No. 2:12-CV-9366-SVW, 2014 WL 7338930, at *4 (C.D. Cal. Dec. 18, 2014) (“Conjoint analysis is a statistical technique capable of using survey data to determine how consumers value a product's individual attributes—often called the market's willingness to pay,” which “is a subjective concept distinct from the fair market value concept”). As multiple courts have held, surveys that seek only to “quantify the relative value a class of consumers ascribed” to an attribute are insufficient to establish “an absolute valuation to be awarded as damages.” *Id.* at *4-5.¹⁸ That is because “willingness to pay” metrics—such as the one Dr. Sukumar performed—

¹⁸ *See, e.g., McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 229 (2d Cir. 2008) (rejecting damages model based on conjoint survey where the court was “asked to conceptualize the impossible—a healthy cigarette—and then to imagine what a consumer might have paid for such a thing”), *abrogated on other grounds by Bridge v. Phx. Bond & Indem. Co.*, 553 U.S. 639 (2008); *NJOY*, 120 F. Supp. 3d at 1122 (“A consumer's subjective valuation of the purported

look only to the “demand side of the market equation,” whereas the “ultimate price of a product is a combination of market demand and market supply.”¹⁹ *NJOY*, 120 F. Supp. 3d at 1119 (quoting *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2014 WL 976898, at *11 (N.D. Cal. Mar. 6, 2014));²⁰ *see also Herron v. Best Buy Stores, LP*, No. 2:12-CV-02103-TLN-CKD, 2016 WL 1572909, at *10 (E.D. Cal. Apr. 19, 2016) (finding “fault with the damages evaluation method proposed by Plaintiff because a laptop’s relative value . . . does not equal its sale price”); *Apple*, 2014 WL 976898, at *11 (rejecting damages model that failed to compare “willingness to pay metrics—which relate only to demand for the patented feature—to the market price of the infringing devices, which reflects the real-world interaction of supply and demand for infringing and noninfringing devices”).

Recognizing this criticism, Dr. Sukumar repeatedly testified that his survey does account for “supply-side” factors because that information is “baked into” the retail-level sales data for the Washers that “became the input” for his survey. (Sukumar Dep. at 76:22–80:12; *see also id.* at 13:14–14:5, 44:16–45:15.) But Dr. Sukumar—who is not an economist (*id.* at 278:13-16)—

safety message, measured by their relative willingness to pay for products with or without the message, is not an accurate indicator of restitutionary damages, because it does not permit the court to calculate the *true market price* of NJOY e-cigarettes absent the purported misrepresentations.”); *Brown*, 2013 WL 7154428, at *6 (“By focusing only on the consumers’ perceived value of one attribute, the conjoint model ignored the market value of the entire product without the misrepresented attribute.”).

¹⁹ As economist Dr. Rossi explained, “conjoint analysis cannot be used to compute market prices” because a conjoint can only “be used under certain circumstances to help inform the demand side, but not the supply side.” (Rossi Dep. at 26:4–28:25.)

²⁰ Defendants recognize that the *NJOY* court denied the defendant’s *Daubert* motions, finding that the argument went not to admissibility but to whether the plaintiffs satisfied *Comcast* and Rule 23(b)(3). Defendants, respectfully, submit that this argument is relevant to both the Rule 23 inquiry and to whether Dr. Sukumar’s testimony meets *Daubert*’s “fit” requirement. *See POM Wonderful LLC Mktg. & Sales Practices Litig.*, MDL No. 2199, 2014 WL 1225184, at *5 & n.6 (C.D. Cal. Mar. 25, 2014) (expert model failed *Comcast* and was inadmissible under *Daubert* where model failed to tie damages to the legal theory).

merely used the sales data to (1) determine the price range (\$200 to \$700) to test in his survey, and (2) determine the Washers' average sales price so that he could convert his \$180 "price premium" into a percentage. (*Id.* at 80:13–81:11, 284:2–10.) This is not a consideration of market supply factors, as the sales data shows only what consumers paid for the Washers at issue, not what consumers paid for comparable non-Energy Star washers. Indeed, Dr. Sukumar admitted that he did not consider competitive offerings or competitive prices, deeming those irrelevant to his survey. (*Id.* at 15:12–23:15, 47:7–18, 79:10–19, 162:10–18; *see also* Rossi Rep. at 21–23.)

Dr. Sukumar's methodology completely ignores the price for which Defendants were willing to sell the Washers, what comparable top-loading washers (Energy Star and non-Energy Star) were available in 2009 and 2010, and the prices at which these comparable machines were sold. Had Dr. Sukumar done so, he would have determined that the "the portion of the retail price attributable to the Energy Star label" (Class Cert. Mem. at 27) was not even close \$180 and may even have been \$0. (*See* Argument, Part II.D, *supra*.) His survey, thus, fails to fit Plaintiff's proffered liability theory. *See, e.g., In re NJOY, Inc. Consumer Class Action Litig.*, No. CV 14-428-JFW (JEMX), 2016 WL 787415, at *7 (C.D. Cal. Feb. 2, 2016) (rejecting damages models where the conjoint survey "only look[s] to the demand side of the market equation, and ignores the price at which NJOY, and other e-cigarette manufacturers, would be willing to sell their products"); *Apple, Inc.*, 2014 WL 976898, at *11 (rejecting conjoint survey that "did not account at all for competitor products or other supply at all," which resulted in figures that did not reflect "what people would actually pay in the marketplace"). Accordingly, because Dr. Sukumar's survey lacks the requisite "connection to the pertinent inquiry," his opinions should be excluded. *Daubert*, 509 U.S. at 592.

B. Dr. Sukumar Fails to Isolate His “Price Premium” from the Benefits Received by Putative Class Members

A valid damages model must account for the benefits that consumers received as a result of buying the product. *See In re ConAgra Foods, Inc.*, 302 F.R.D. 537, 579 (C.D. Cal. 2014). Yet Dr. Sukumar ignores the benefits that Washer buyers received, instead improperly assuming they are entitled to 100% of whatever “price premium” that they supposedly paid regardless of whether they received most—if not all—of the benefits justifying that price premium’s existence. *See POM Wonderful*, 2014 WL 1225184, at *5 & n.6 (expert report was inadmissible under *Daubert* where expert merely “assumed that 100% of that price difference was attributable to Pom’s alleged misrepresentations”). Here, Dr. Sukumar ignores the substantial utilities savings that consumers did receive (*see* Sukumar Dep. at 217:7–218:23), and he also ignores the rebates and other monetary incentives given to consumers, including Plaintiffs, for buying a Washer (*see, e.g.*, Dep. of Kari Parsons, May 19, 2015, at 120:8–121:1, Defs.’ Subm. Ex. M).

More fundamentally, Dr. Sukumar’s failure to isolate the “price premium” from the benefits actually received shows that his damages model is divorced from Plaintiffs’ own “fundamental bargain” theory of liability: that “consumers pay a higher up-front purchase price but save more on water and energy bills.” (2d Am. Compl. ¶¶ 2, 6.) That is improper under *Daubert* and *Comcast*. *See POM Wonderful*, 2014 WL 1225184, at *5 & n.6 (striking expert report for failure to “draw any link between Pom’s actions and the price difference”). Because Dr. Sukumar “did not even attempt to measure the value of the product received discounted for any misrepresent[ation],” his opinions do not fit Plaintiffs’ own theory of liability. *Brown*, 2013 WL 7154428, at *6.

**IV. BECAUSE DR. SUKUMAR’S TESTIMONY MUST BE EXCLUDED,
PLAINTIFFS CANNOT MEET THEIR BURDEN ON CLASS CERTIFICATION**

Plaintiffs rely on Dr. Sukumar to establish that damages are “calculable based on objective classwide evidence,” thereby proving that common questions predominate over individual questions as required by Federal Rule of Civil Procedure 23(b)(3). (Class Cert. Mem. at 27-29.) However, a plaintiff “cannot rely on challenged expert testimony, when critical to class certification, to demonstrate conformity with Rule 23 unless the plaintiff also demonstrates, and the trial court finds, that the expert testimony satisfies the standard set out in *Daubert*.” *Blood Reagents*, 783 F.3d at 187-88; *Comcast*, 133 S.Ct. at 1432 (“[e]xpert testimony that is insufficiently reliable to satisfy the *Daubert* standard cannot . . . establish ‘through evidentiary proof’ that Rule 23(b) is satisfied”). Because Dr. Sukumar’s testimony does not satisfy *Daubert* and should be excluded, Plaintiffs’ motion for class certification should be denied as well.

CONCLUSION

For the foregoing reasons, Defendants respectfully request that this Court strike the opinions of Dr. R. Sukumar.

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